

**SEM SAMPLE HOLDER APPARATUS FOR IMPLEMENTING ENHANCED
EXAMINATION OF MULTIPLE SAMPLES**

Abstract of the Disclosure

5 A method and a scanning electron microscope (SEM) holder
apparatus are provided for implementing examination of multiple samples.
The SEM holder apparatus includes a metal plate. The metal plate includes
a plurality of through holes arranged in a predefined pattern, a mounting
opening, and an O-ring receiving recess extending within the metal plate to
10 the plurality of through holes. The SEM holder apparatus includes a plurality
of sample holders, each inserted within a selected one of the plurality of
through holes. An O-ring is inserted within the O-ring receiving recess to
provide a secure mounting of the plurality of sample holders. The O-ring
protrudes partially into the through holes receiving the sample holders,
15 providing positive holding pressure that ensures a secure mounting of the
sample holders to provide electrical conductivity and vibration suppression.